

CLAIMS:

A matrix display device comprising an array of addressable pixels each having a display element and a control circuit for controlling the operation of the display element, the control circuit comprising

a charge storage capacitor and a photosensitive device coupled to the storage capacitor for regulating charge stored on the storage capacitor in accordance with light falling on the photosensitive device,

a driving element for driving the display element, a control terminal of the driving element being connected to said storage capacitor,

an addressing element for applying a data signal to the driving element, and

10 means for independent voltage control of a control terminal of the photosensitive device.

2. A matrix display device according to claim 1, wherein the independent voltage control means comprise a selection line being connected to the gate terminal of the
15 photosensitive device.

3. A matrix display device according to claim 1, wherein the photosensitive device comprises a thin film transistor of the same conductivity type as a conductivity type of the driving element and the addressing element.
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4. A matrix display device according to claim 1, wherein the display element comprises an Organic Light Emitting Diode.

5. A matrix display device according to claim 2, wherein the selection line is
25 individually addressable for each selection line of the display.

6. A matrix display device according to claim 2, wherein the selection line is formed by a single common terminal.

7. A display apparatus, comprising:
a matrix display device as claimed in claim 1,
a data driver circuit for applying said data signal to a data terminal of the
addressing switch element; and
5 a selection driver circuit for applying a selection signal to said selection line.
8. A display apparatus according to claim 7, wherein said independent voltage
control means comprise duty cycle control means.